WHAT IS CLAIMED, IS

1. Method for compensating an offset in an asymmetric reproduction signal (DRSO), whereby an offset compensation signal (OFS) is subtracted from the reproduction signal (DRSO), the offset compensation signal being generated by an offset compensator, **characterized in that** it comprises the steps of:
detecting a binary data signal (NRZ) from the asymmetric reproduction signal (DRSO); and
using the binary data signal (NRZ) for obtaining the offset compensation signal (OFS).

2. Method according to claim 1, **further comprising** the step of detecting the shortest run-length components of the binary data signal (NRZ) for obtaining the offset compensation signal (OFS).

3. Method according to claim 1, **further comprising** the step of delaying the asymmetric reproduction signal (DRSO) before obtaining the offset compensation signal (OFS) and/or before subtracting the offset compensation signal (OFS) from the reproduction signal (DRSO).

4. Method according to claim 1, **further comprising** the step of centering the asymmetric reproduction signal (DRSO) with regard to a digital zero line before detecting the binary data signal (NRZ).

5. Method according to claim 1, **wherein** a partial response maximum likelihood detector (8,9) or a bit-by-bit detector (9) is used for detecting the binary data signal (NRZ).

6. Method according to claim 1, **wherein** a plurality of run-lengths of the binary data signal (NRZ) are detected for

obtaining run-length dependent offset compensation signals (OFS) and for enabling the offset compensation accordingly.

7. Offset compensator for compensating an offset in an asymmetric reproduction signal (DRSO), the offset compensator comprising an offset compensation signal generator (11) for generating an offset compensation signal (OFS), and a subtractor (7) for subtracting the offset compensation signal (OFS) from the reproduction signal (DRSO), **characterized in that** it further comprises a binary data signal detector (8,9) for generating a binary data signal (NRZ) from the asymmetric reproduction signal (DRSO), the binary data signal (NRZ) being used for obtaining the offset compensation signal (OFS).

8. Offset compensator according to claim 7, **further comprising** a shortest run-length detector (12) for detecting the shortest run-length components of the binary data signal (NRZ) for obtaining the offset compensation signal (OFS).

9. Offset compensator according to claim 7, **further comprising** delay means (10) for delaying the asymmetric reproduction signal (DRSO) before obtaining the offset compensation signal (OFS) and/or before subtracting the offset compensation signal (OFS) from the reproduction signal (DRSO).

10. Offset compensator according to claim 7, **further comprising** means (6) for centering the asymmetric reproduction signal (DRSO) with regard to a digital zero line before generating the binary data signal (NRZ).

11. Offset compensator according to claim 7, **further comprising** a partial response maximum likelihood detector (8,9) or a bit-by-bit detector (9) for generating the binary data signal NRZ.

12. Offset compensator according to claim 7, **further comprising** a plurality of run-length detectors (12) for detecting a plurality of run-lengths of the binary data signal (NRZ) for obtaining run-length dependent offset compensation signals (OFS) and for enabling the offset compensation accordingly.

13. Apparatus for reading from and/or writing to optical recording media, **characterized in that** it performs a method according to any of claims 1-6 or comprises an offset compensator according to any of claims 7-12.